INTRODUCTION

Purpose and format of this report

This is the fourteenth annual summary of reportable diseases published by the Kansas Department of Health and Environment (KDHE). The purpose of this report is to provide useful information for health care providers, public health workers, and policy makers about infectious diseases in Kansas.

The report is divided into three sections. Section I presents summaries of infectious, reportable diseases or conditions of public health importance. While 56 diseases were reportable in Kansas during 2005, many were not detected; summaries are presented for those 34 conditions that were reported. Cases must meet the surveillance definition for a confirmed case and be reported to KDHE before February 29, 2006 to be included in this document. Each of the disease summaries includes a brief overview, laboratory tests commonly used for diagnosis, and the surveillance case definition. Tables and graphs supplement a review of the disease in Kansas, including key statistics and trends. Rates by demographic characteristics and proportional changes from the previous year are reported only if more than 50 cases of a disease was reported. Rates have been calculated from the Vintage 2004 Population Estimates provided by the U.S. Census Bureau and National Center for Health Statistics. Whenever possible, information about disease trends for the United States has been included for comparison with Kansas' trends. Due to confidentiality concerns, limited demographic information is presented if fewer than five total cases of a disease were reported.

Disease incidence of urban and non-urban counties has been included for many diseases. Urban counties are designated based upon population density. Five counties account for approximately half of the state population: Johnson, Wyandotte, Sedgwick, Shawnee, and Douglas. The remaining 100 counties in the state are aggregated into the "non-urban" category.

Race data is collected uniformly for most diseases as follows: American Indian/Alaskan Native (AIAN), Asian/pacific Islander (API), Black/African-American, and White. Ethnicity data is reported as either Hispanic or non-Hispanic.

Section II includes special studies and reports. Section III includes reference documents and supplementary tables.

Disease reporting in Kansas

Health care providers, laboratories, and hospitals are required by Kansas law (K.S.A. 65-118, 65-128; 65-6001 through 65-6007; K.A.R. 28-1-2, 28-1-4, and 28-1-18) to report selected diseases and conditions. Reports of infectious diseases are initially sent to KDHE's Bureau of Epidemiology and Disease Prevention (BEDP), where they are reviewed and forwarded to local health departments. The local health departments are

responsible for any required investigation and for instituting basic public health interventions.

Case reports are stored in the Kansas integrated electronic disease surveillance system (also known as HAWK). HAWK is a central, statewide database of reportable and selected non-reportable diseases and conditions. It can be accessed via the internet by authorized public health officials. To protect restricted, confidential, health and clinical data of individuals, internal security structures are in place. The HAWK system allows users to report disease occurrences rapidly and efficiently; user may also generate summary statistics and reports to assist in evaluating public health efforts. Kansas' disease incidence numbers are transmitted from HAWK to the Centers for Disease Control and Prevention (CDC) every week for inclusion in *Morbidity and Mortality Weekly Report* (*MMWR*), a series of publications produced by the CDC's Epidemiology Program Office.

In collaboration with the Council of State and Territorial Epidemiologists (CSTE), CDC publishes case definitions for public health surveillance - the CDC/CSTE surveillance case definitions combine clinical, laboratory, and epidemiologic criteria. By providing uniform criteria for disease reporting, case definitions allow greater specificity and comparability of diseases reported from different geographic regions. The CDC/CSTE case definitions can be found at:

- http://www.cdc.gov/mmwr/preview/mmwrhtml/00047449.htm
- http://www.cdc.gov/epo/dphsi/casedef/case_definitions.htm
- Centers for Disease Control and Prevention. Case definitions for infectious conditions under public health surveillance. MMWR 1997; 46 (no. RR-10).

The usefulness of public health surveillance data depends on its uniformity, simplicity, and timeliness. The case definitions in this report follow the CDC/CSTE surveillance definitions for disease reporting and should not be confused with clinical diagnoses. The use of additional clinical, epidemiologic, and laboratory data may enable a physician to diagnose a disease even though the formal standardized surveillance case definition may not be met.

Interpretation of the data

When interpreting the data in this report, it is important to remember that the completeness of disease reporting is variable. For example, reporting of AIDS cases is estimated to be 90% complete, while nationwide reporting of salmonellosis is estimated to be 2% complete. When interpreting data, absolute numbers are less meaningful than trends; however, trends can be influenced by changes in case definitions, reporting patterns, and by random fluctuations. It is also important to note that small numbers affect rates and interpretation of rates. Small case numbers can produce artificially high disease rates and unstable, widely fluctuating disease trends.